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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/573,233

06/15/2006

Willi-Kurt Gries

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07/07/2008

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EXAMINER

VAUGHAN II, JUAN E

ART UNIT

PAPER NUMBER

1795

MAIL DATE

DELIVERY MODE

07/07/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/573,233	<b>Applicant(s)</b> GRIES ET AL.	
	<b>Examiner</b> JUAN E. VAUGHAN II	<b>Art Unit</b> 1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 June 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>03/21/2006</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-33 are rejected under 35 U.S.C. 102(b) as being anticipated by KONDO et al. (US 6,830,874 B2).

KONDO et al. disclose a method for preparing a lithographic printing plate that comprises a photosensitive layer and protective layer on an aluminum substrate (support) (abstract; col. 29, lines 48-50). The photosensitive layer comprises an addition polymerizable compound or ethylenically unsaturated bond-containing compound, a photopolymerization initiator, a coloring agent (sensitizer), and a polymer binder (col. 18, lines 1-11). The polymer binder includes addition polymers having carboxyl groups on the side chains such as methacrylic acid copolymers, acrylic acid copolymers, itaconic acid copolymers, crotonic acid copolymers, maleic acid copolymers, and partially esterified maleic acid copolymers ( $\alpha$ ,  $\beta$ -unsaturated carboxylic acid copolymers) (col. 27, 30-37). The polymerizable compound may further contain urethane acrylates and polyfunctional (meth)acrylates (col. 19, lines 29-32). The photosensitive layer may also have radical reactive groups introduced into organic polymers; these groups include mercapto groups, thiol groups, halogen atoms, and triazine and onium salt structures (col. 27, lines 63-37-col. 28, lines 1-50). KONDO et al. teach the photoinitiation system of the

invention includes a radical initiator, such as a hexaarylbiimidazole compound and a dye, such as a ketocoumarin dye (optical brightening agent) which meets the limitation of structure (XI) of instant claim 8 when one or more of the nuclei are substituted with an amino group (col. 19, line 64; col. 24, lines 45-55). The photopolymerization initiation system is present in amounts of 0.05 to 100 parts by weight of the ethylenically unsaturated bond-containing compound, meeting the limitation of the optical brightening agent being present in amounts of 0.1 to 10% by weight of the photopolymerization composition in instant claim 8. The protective layer comprises one or more types of polyvinyl alcohol with saponification degrees of 71% to 100% (less than 93 mol-%) (col. 29, lines 58-60). The printing plate is imagewise exposed to a light source emitting light at  $100 \mu\text{J}/\text{cm}^2$  ( $100 \mu\text{J}/\text{cm}^2$  or less) and subjected to standard treatment in an automatic developing machine (processing) (col. 39, lines 12-20).

***Claim Rejections - 35 USC § 103***

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over GRIES et al. (US 2003/0186165 A1) in view of KONDO et al. (US 6,830,874 B2).

GRIES et al. teaches a photopolymerizable composition, sensitized for the wavelength range from 300 to 450 nm, enabling the preparation of lithographic photopolymer plates (abstract). The photopolymerizable composition comprises a binder, a polymerizable compound, a sensitizer, and a photoinitiator (abstract). The sensitizer is an optical brightening agent and the structures representing the agent in paragraph [0009] of GRIES et al. meet the limitations of the structures in instant claim 8. The overall amount of the agents ranges from 0.1 to 10% by weight with respect to the total weight of the non-volatile compounds in the composition ([0012]). The initiator is a hexaarylbiimidazole ([0060]). The polymerizable compound can be selected from tertiary amino groups, at least one additional urea and/or urethane group ([0065]). The composition can contain polyfunctional (meth)acrylate or alkyl(meth)acrylate compounds as crosslinking agents ([0101]). A radical chain transfer agent is preferably added to the composition ([0104]). The binder is a polymer containing monomeric units of an  $\alpha$ ,  $\beta$ -unsaturated carboxylic acid or an  $\alpha$ ,  $\beta$ -unsaturated dicarboxylic acid (see reference claim 4). The lithographic printing plate precursor of the invention is exposed to a laser having an emission wavelength in the range of 390 to 420 nm with an energy density of 100  $\mu\text{J}/\text{cm}^2$  or less (see reference claims 12 and 13).

GRIES does not explicitly disclose a protective coating comprising one or more types of poly(vinyl alcohol) wherein the mean saponification degrees of all the poly(vinyl alcohols) in the protective coating is less than 93 mol-%. However, it is well known in the art to provide a protective layer (protective coating), comprising one or more polyvinyl alcohols with saponification degrees of 71% to 100% (less than 93 mol-%), on a photosensitive layer to eliminate the polymerization-inhibitory effect of oxygen in the air as taught by KONDO et al. (col. 29, lines 48-60).

### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JUAN E. VAUGHAN II whose telephone number is (571)270-5125. The examiner can normally be reached on Monday - Friday 8AM-5PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on (571)272-1526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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JEV II

/Cynthia H Kelly/  
Supervisory Patent Examiner, Art Unit 1795